

## FAIR HAVEN

### UTILITY INSTALLATION : ELECTRICAL POWER SERVICE

CONTRACTOR IS TO PERFORM ALL ELECTRICAL SERVICE INSTALLATION AS REQUIRED. ELECTRICAL POWER SERVICE FOR THE FAIR HAVEN RWIS SHALL BE OBTAINED FROM THE EXISTING SERVICE PANEL LOCATED IN THE WELCOME CENTER UTILITY ROOM. THE CONTRACTOR AND HIS ELECTRICAL SUBCONTRACTOR SHALL PROVIDE BREAKER(S) AND CONDUIT WITH WIRES FROM THE PANEL THROUGH THE EXTERIOR WALL OF THE UTILITY ROOM FROM THERE THROUGH THE UTILITY TRENCH CONDUIT TO THE RWIS TOWER AS SHOWN BY THE ROUTING ON SHEET 5 OF 12. ALL COST ASSOCIATED WITH THE INSTALLATION OF POWER SERVICE FOR THIS LOCATION IS CONSIDERED TO BE AN INCIDENTAL COST TO THE OVERALL PROJECT.

ELECTRICAL SERVICE REQUIREMENT: ELECTRICAL SERVICE AT THE SITE IS TO BE 115 VOLTS, 60 HZ, 30 AMP SERVICE. CONTRACTOR TO INSTALL (6) - #10 THHN WIRES IN 1 SINGLE 2" CONDUIT OR APPROVED EQUAL FROM A CODE ALLOWABLE ELECTRICAL CIRCUIT. ALL PVC CONDUIT IS TO BE SCH 80 ABOVEGROUND AND SCH 40 UNDERGROUND.

UTILITY INSTALLATION SPECIAL PROVISIONS: PHONE SERVICE  
CONTRACTOR TO PERFORM ALL PHONE WIRING INSTALLATION AS REQUIRED BY THE PHONE UTILITY COMPANY, VERIZON CORPORATION. CONTACT VERIZON AT (802) 295-8176. CONTRACTOR IS TO COORDINATE DIVISION OF RESPONSIBILITY FOR PHONE SERVICE INSTALLATION WITH VERIZON CORPORATION. ALL COST ASSOCIATED WITH THE PHONE SERVICE INSTALLATION IS CONSIDERED TO BE AN INCIDENTAL COST TO THE OVERALL PROJECT.

## MENDON

### UTILITY INSTALLATION : ELECTRICAL POWER SERVICE

CONTRACTOR IS TO PERFORM ALL ELECTRICAL SERVICE INSTALLATION AS REQUIRED BY THE AFFECTED UTILITY COMPANY, CENTRAL VERMONT PUBLIC SERVICE COMPANY (CVPS). CONTACT CVPS AT (800) 649-2877. INSTALLATION AT THIS SITE REQUIRES BOTH POLE MOUNTED EQUIPMENT AND INSTALLATION OF A PEDESTAL MOUNTED METER SOCKET AND DISCONNECT INSTALLATION. CONTRACTOR IS TO COORDINATE DIVISION OF RESPONSIBILITY FOR POWER RELATED APPURTENANCES INSTALLATION WITH THE POWER UTILITY COMPANY. ALL COST ASSOCIATED WITH THE INSTALLATION OF POWER SERVICE FOR THIS LOCATION IS CONSIDERED TO BE AN INCIDENTAL COST TO THE OVERALL PROJECT.

ELECTRICAL SERVICE REQUIREMENT: ELECTRICAL SERVICE AT THE SITE IS TO BE 115 VOLTS, 60 HZ, 30 AMP SERVICE. CONTRACTOR TO INSTALL (6) - #10 THHN WIRES IN 1 SINGLE 2" CONDUIT OR APPROVED EQUAL FROM A CODE ALLOWABLE ELECTRICAL CIRCUIT. ALL PVC CONDUIT IS TO BE SCH 80 ABOVEGROUND AND SCH 40 UNDERGROUND.

UTILITY INSTALLATION SPECIAL PROVISIONS: PHONE SERVICE  
CONTRACTOR TO PERFORM ALL PHONE WIRING INSTALLATION AS REQUIRED BY THE PHONE UTILITY COMPANY, VERIZON CORPORATION. CONTACT VERIZON AT (802) 295-8176. CONTRACTOR IS TO COORDINATE DIVISION OF RESPONSIBILITY FOR PHONE SERVICE INSTALLATION WITH VERIZON CORPORATION. ALL COST ASSOCIATED WITH THE PHONE SERVICE INSTALLATION IS CONSIDERED TO BE AN INCIDENTAL COST TO THE OVERALL PROJECT.

## FAIR HAVEN RWIS - INSTRUMENTATION SCHEDULE

Quantity	Item Description	Model Number
1	30-ft ANS Incor Equal Fold-Over Aluminum Tower with Tower Base Plate, Level Base and Anchor Bolts. Also Include Anti-Climb Panels (ACI300), Hinge Assembly at 10-ft height, 5-ft Aluminum Mast, Lightning Rod with Three 8' Ground Rod Kit and Secured Winch	APPROACH NAVIGATIONAL SYSTEMS T30
1	RWIS Master Processing Unit with I/O Interface Card and NTCIP Communication Card with VAISALA Standard NEMA 4 Box	DM32SYS
3	Surface Pavement Sensor w/ 100 m cable	DRS511AB10
1	Subsurface Temperature Sensor w/ 100 m cable	DTS151UKG10
1	Present Weather & Visibility Sensor	PWD12
1	Air Temperature & Humidity Sensor	HMP45D
1	Solar Radiation Shield	DTR 502
1	ICE FREE Wind Speed & Direction Sensor	DM3WIND
1	Sensor Support Arm and Accessories	ICENAXARM
1	Fixed Position Video Camera with Heated Enclosure, Accessories and Software	VIDEOFIXED
1	IceView Workstation Software License	ICEVIEW

Note:

RWIS INSTRUMENTATION AND SOFTWARE LISTED ABOVE TO BE ORDERED AND PROVIDED UNDER A SEPERATE VTRANS RETAINER CONTRACT WITH RWIS EQUIPMENT VENDOR. CONTRACTOR TO COORDINATE WITH RWIS EQUIPMENT VENDOR AS NECESSARY FOR ASSISTANCE WITH THE INSTALLATION OF SENSORS, CABLING AND TOWER.

## MENDON RWIS - INSTRUMENTATION SCHEDULE

Quantity	Item Description	Model Number
1	30-ft ANS Incor Equal Fold-Over Aluminum Tower with Tower Base Plate, Level Base and Anchor Bolts. Also Include Anti-Climb Panels (ACI300), Hinge Assembly at 10-ft height, 5-ft Aluminum Mast, Lightning Rod with Three 8' Ground Rod Kit and Secured Winch	APPROACH NAVIGATIONAL SYSTEMS T30
1	RWIS Master Processing Unit with I/O Interface Card and NTCIP Communication Card with VAISALA Standard NEMA 4 Box	DM32SYS
3	Surface Pavement Sensor w/ 50 m cable	DRS511AB5
1	Subsurface Temperature Sensor w/ 50 m cable	DTS151UKG5
1	Present Weather & Visibility Sensor	PWD12
1	Air Temperature & Humidity Sensor	HMP45D
1	Solar Radiation Shield	DTR 502
1	ICE FREE Wind Speed & Direction Sensor	DM3WIND
1	Sensor Support Arm and Accessories	ICENAXARM
1	Fixed Position Video Camera with Heated Enclosure, Accessories and Software	VIDEOFIXED
1	IceView Workstation Software License	ICEVIEW

Note:

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ESTIMATED QUANTITIES		TOTALS		DESCRIPTIONS		ITEM NUMBER	
FAIR HAVEN RWIS SITE	MENDON RWIS SITE	RND	GRAND TOTAL	FINAL	UNIT	ITEMS	
0	1	0	1		EA	REMOVING MEDIUM TREES	201J5
0	13	2	13		CY	COMMON EXCAVATION	203J5
1	1	0	2		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.J.)	204.22
30	30	6	60		CY	STRUCTURE EXCAVATION	204.25
23	23	4	46		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30
0	13	2	13		CY	SUBBASE OF CRUSHED GRAVEL, COARSE GRADED	301.25
4	4	2	8		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35
2	0	1	2		TON	BITUMINOUS CONCRETE PAVEMENT (PG 58-28)	406.25
365	365	36	730		LB	REINFORCING STEEL	507J5
7	7	3	14		CY	CONCRETE, CLASS B	541.25
24	24	0	48		HR	UNIFORMED TRAFFIC OFFICERS	630J0
24	24	0	48		HR	FLAGGERS	630J5
0.6	0.4	0	1		LS	MOBILIZATION/DEMobilIZATION	635J1
0.6	0.4	0	1		LS	TRAFFIC CONTROL	641J0
2	2	0	4		EA	PORTABLE CHANGABLE MESSAGE SIGN	641J5
0	37	3	37		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649J1
29	34	4	63		SY	GEOTEXTILE FOR SILT FENCE	649J51
3	2	0	5		LB	SEED	651J5
5	4	0	9		LB	SEED, WINTER RYE	651J7
31	26	0	57		LB	FERTILIZER	651J8
0J	0J	0	0.2		TON	AGRICULTURAL LIMESTONE	651.20
0.2	0.2	0	0.4		TON	HAY MULCH	651.25
21	18	0	39		CY	TOPSOIL	651.35
0.5	0.5	0	1		LS	EPSC PLAN	652J0
10	10	0	20		HR	MONITORING EPSC PLAN	652.20
0.5	0.5	0	1		LS	MAINTENANCE OF EPSC PLAN (N.A.B.J.)	652.30
900	275	30	1175		LF	PROJECT DEMARCATION FENCE	653.55
0	1	0	1		EA	REMOVING SIGNS	675.50
0	1	0	1		EA	ERECTING SALVAGED SIGNS	675.60
250	130	25	380		LF	ELECTRICAL CONDUIT (2"X PVC)	678.21
530	400	50	930		LF	WIRED CONDUIT (2"X PVC)	678.23
2	1	0	3		EA	JUNCTION BOX	678.26

QUANTITY NOTE: ALL PAVEMENT SAWCUTTING, "CHISELING" ASSISTANCE, AND CLEANING/DRYING OF THE SAWCUT, NECESSARY FOR SENSOR INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO ITEM 678.21 - ELECTRICAL CONDUIT.

PROJECT:	FAIR HAVEN: RWIS MENDON: RWIS
FILE NAME: 010001qnt.dgn	PLOT DATE: 24-AUG-2007
PROJECT LEADER: D. GRAHAVOC	DRAWN BY: MAL
DESIGNED BY: BMB	CHECKED BY: MDL
VENDOR EQUIPMENT AND BILL OF MATERIALS SHEET 3 OF 12	